

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Canceled).

Claim 4 (Withdrawn): A plasma processing apparatus as claimed in claim 1, wherein said material constituting said conductive material portion is silicon.

Claim 5 (Withdrawn): A plasma processing apparatus as claimed in claim 1, wherein said material constituting said dielectric material portion is silicon dioxide.

Claim 6 (Withdrawn): A focus ring having a contact portion to be disposed in contact with an electrostatic chuck on which is mounted an object to be processed that is to be subjected to plasma processing, the focus ring comprising:

a dielectric material portion that forms said contact portion; and
a conductive material portion that faces said electrostatic chuck with said dielectric material portion therebetween.

Claim 7 (Withdrawn): A susceptor comprising:
an electrostatic chuck on which is mounted an object to be processed that is to be subjected to plasma processing; and
a focus ring having a contact portion disposed in contact with said electrostatic chuck;
wherein said focus ring has a dielectric material portion that forms said contact portion, and a conductive material portion that faces said electrostatic chuck with said dielectric material portion therebetween.

Claim 8 (Currently Amended): A plasma processing apparatus comprising:
a susceptor having an electrostatic chuck on which is mounted an object to be
processed that is to be subjected to plasma processing, and a focus ring having a contact
surface disposed in contact with said electrostatic chuck around a periphery of the object to
be processed, said focus ring being mounted on said electrostatic chuck, said electrostatic
chuck having a chuck device to which a chuck voltage is applied, and said electrostatic chuck
attracting said focus ring by electrostatic attraction generated by the chuck voltage applied to
said chuck device; [[and]]

heat exchange means provided at said contact surface, for carrying out heat exchange
with said focus ring, said heat exchange means comprising a groove provided in said contact
surface and filled with a heat transfer medium; and

a controller that controls the chuck voltage applied to said chuck device, said
controller changing the chuck voltage in accordance with each of sequences of a plasma
process; wherein

said controller sets the chuck voltage applied to the chuck device high during at least
one processing sequence.

Claims 9-10 (Canceled).

Claim 11 (Currently Amended): A plasma processing apparatus as claimed in claim
[[9]] 8, wherein said groove is formed in said focus ring.

Claim 12 (Currently Amended): A plasma processing apparatus as claimed in claim
[[9]] 8, wherein said groove is formed in said electrostatic chuck.

Claim 13 (Currently Amended): A plasma processing apparatus as claimed in claim [[9]] 8, wherein said groove has a depth of not less than 0.1mm.

Claim 14 (Currently Amended): A plasma processing apparatus as claimed in claim [[9]] 8, wherein said groove has corners thereof rounded off.

Claim 15 (Currently Amended): A plasma processing apparatus as claimed in claim [[9]] 8, wherein said groove comprises at least one groove having an annular shape concentric with said focus ring.

Claim 16 (Original): A plasma processing apparatus as claimed in claim 8, wherein said heat exchange means comprises cooling means for cooling said focus ring.

Claim 17 (Original): A plasma processing apparatus as claimed in claim 16, wherein said heat exchange means comprises a supply path that supplies a heat transfer gas to said contact surface, the plasma processing apparatus further comprising a controller that controls a pressure of the heat transfer gas supplied from said heat exchange means, and wherein the plasma processing comprises a plurality of steps, and said controller changes the pressure of the heat transfer gas supplied in accordance with each of the steps.

Claim 18 (Currently Amended): A plasma processing apparatus as claimed in claim 16, ~~further comprising wherein said chuck device comprises~~ an electrode built into said electrostatic chuck in a manner facing said focus ring, and ~~a controller that controls a voltage applied to said electrode, wherein said electrode attracts said focus ring to said electrostatic chuck by electrostatic attraction, the plasma processing comprises a plurality of steps, and~~

~~said controller changes the voltage applied to said electrode in accordance with each of the steps.~~

Claim 19 (Currently Amended): A plasma processing apparatus as claimed in claim 16, wherein said heat exchange means reduces a temperature of said focus ring to at least [[20K]] 20°C below a temperature of said electrostatic chuck.

Claim 20 (Original): A plasma processing apparatus as claimed in claim 19, wherein said heat exchange means reduces the temperature of said focus ring to not more than 0°C.

Claim 21 (Original): A plasma processing apparatus as claimed in claim 16, wherein said heat exchange means comprises heating means for heating said focus ring.

Claim 22 (Withdrawn): A plasma processing apparatus as claimed in claim 16, wherein said focus ring further comprises second heating means for heating said focus ring.

Claim 23 (Withdrawn): A plasma processing apparatus as claimed in claim 16, wherein said focus ring is exposed to a cleaning gas.

Claim 24 (Withdrawn): A plasma processing apparatus as claimed in claim 16, wherein said focus ring is exposed to a plasma.

Claim 25 (Withdrawn): A plasma processing apparatus as claimed in claim 8, wherein said heat exchange means comprises a Peltier device.

Claim 26 (Withdrawn): A focus ring having a contact surface to be disposed in contact with an electrostatic chuck on which is mounted an object to be processed that is to be subjected to plasma processing, around a periphery of the object to be processed, the focus ring comprising:

heat exchange means provided at said contact surface , for carrying out heat exchange with said focus ring.

Claim 27 (Withdrawn): A susceptor comprising:
an electrostatic chuck on which is mounted an object to be processed that is to be subjected to plasma processing;
a focus ring having a contact surface disposed in contact with said electrostatic chuck around a periphery of the object to be processed; and
heat exchange means provided at said contact surface , for carrying out heat exchange with said focus ring.